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10/599,675	07/06/2007	Hans Lindell	VSIB16849	2710

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SUITE 203

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EXAMINER

MATTER, KRISTEN CLARETTE

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/599,675	<b>Applicant(s)</b> LINDELL ET AL.	
	<b>Examiner</b> KRISTEN C. MATTER	<b>Art Unit</b> 3771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 9, 10 and 20 is/are rejected.
- 7) ☒ Claim(s) 5-8 and 11-19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 September 2008 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/20/06</u> .  | 6) <input type="checkbox"/> Other: _____                          |

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### **DETAILED ACTION**

This Action is in response to the claims filed 9/27/2008. The amended claim set of 10/5/2006 is not in the proper form of a preliminary amendment and as such the claims were not entered for purposes of being considered on the merits. Thus, claims 1-20 are currently pending in the instant application.

### **Priority**

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Sweden on 4/5/2004. It is noted, however, that applicant has not filed a certified copy of the 0400892-6 application as required by 35 U.S.C. 119(b).

### **Information Disclosure Statement**

The information disclosure statement (IDS) submitted on 11/20/06 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

However, examiner notes that the second listed US patent is missing a number. Examiner considered the references listed on the international search report (i.e., those matching the other listed documents on the IDS) and has indicated the correct patent number on the considered IDS for the Truitt reference.

### **Drawings**

The drawings are objected to because the exploded/separate elements shown in Figure 3 must be accompanied by a connector clearly indicating how the pieces fit together or are related to the same Figure (i.e., a simple connecting bracket will suffice to overcome the objection).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### **Claim Objections**

Claims 5-8 and 11-19 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim must refer to multiple claims in the alternate only (claim 5 and its dependent claim 6) and a multiple dependent claims cannot refer back to another multiple

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dependent claim (claims 7, 8, 11, 13, 15, 16, 18, 19, and their respective dependent claims). See MPEP § 608.01(n). Accordingly, the claims 5-8 and 11-19 have not been further treated on the merits.

Claim 20 is objected to because of the following informalities: claim 20 is written as a “method” but contains no method steps (i.e., the body of the claim is just structural limitations as in an apparatus claim). Applicant should change the claim to an apparatus claim. Appropriate correction is required.

### **Claim Rejections - 35 USC § 112**

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-4, 9, and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 refers to “said membrane wall portion” in line 16. However, there may be more than one membrane wall portion as indicated in line 15. Examiner suggests adding “at least one” before “membrane wall portion” in line 16 to overcome the rejection.

Claims 2-4, 9 and 10 are rejected by virtue of their dependence on claim 1.

### **Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-4 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Champain et al. (FR 2663547, herein referred to as “Champain”) in view of DeVries et al. (US 6,877,511, herein referred to as “DeVries”) and Huang et al. (US 6,988,057, herein referred to as “Huang”).**

Regarding claims 1 and 20, Champain discloses a ventilator comprising: an external housing (10), an internal housing (9) suspended in said external housing (i.e., Figures 1 and 2 show the housing within the external housing and thus there must be some sort of suspension to hold it in place), a gas flow generator (6) located within the internal housing (see Figures 1 and 2), a first gas inlet opening in the external housing (at 20), a second gas inlet opening (13) in the internal housing, and a gas outlet conduit (18) extending from a first gas outlet opening (17) in the internal housing via a second gas outlet opening (near reference character 19) in the external housing and to a patient interface means (1) to introduce air to a patient.

Champain appears to lack an inlet conduit (i.e., there is none shown in the Figures). However, DeVries teaches a ventilator with internal and external housings and an inlet conduit (24) extending from an inlet opening in the external housing all the way to the compressor (14). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided Champain with a gas inlet conduit as taught by DeVries in order to better direct incoming air into the compressor.

Champain discloses a first rigid conduit section (12) but lacks a membrane conduit section having at least one flexible membrane portion separating a volume of breathable gas

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within the inlet/outlet conduit and a volume of ambient air in the external housing while allowing acoustic transfer. However, Huang discloses a method for reducing noise in fan systems (column 1, line 20) comprising a rigid pipe having a flexible membrane to separate volumes of gases while allowing acoustic energy transfer (see abstract and Figure 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided either the inlet or outlet conduit of Champain with a flexible membrane portion as taught by Huang in order to reduce fan noise. Furthermore, Champain discloses the need for noise reduction (i.e., the sound proofed box -- see abstract) and it appears as though Champain would perform equally well with the membrane having a flexible membrane portion to even further reduce noise.

Regarding claims 2 and 3, Champain discloses a chamber (zigzag channel 12) arranged on an exterior face of the internal housing (see Figure 2), the exterior face defining an inner wall section of the chamber (see Figure 2), the chamber comprising a frame element (the side walls of the conduit/chamber). It would have been obvious to one of ordinary skill in the art to place the flexible membrane wall portion within the zigzag channel (12)/chamber because this portion of the chamber has air flowing through it and is closest to the vibrations of the blower for example. Furthermore, there is nothing structurally preventing the wall portion from being anywhere along the air flow path and it appears as though Champain would perform equally well with such a modification.

Regarding claim 4, Champain discloses a sound absorbent layer (abstract) provided on the exterior face of the chamber (i.e., box 9 is "soundproofed" and thus it is obvious (if not inherent) to have a layer on it's external surface as is well known in the art).

**Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Champain, DeVries, and Huang as applied to claims 1-4 and 20 above, and further in view of Sharpe et al. (US 2002/0078956, herein referred to as “Sharpe”) and Wondka (US 7,406,966).**

Regarding claims 9 and 10, Champain is silent as to the conduit section being a flexible tube section of a polyhedral shape and formed of silicone rubber. However, Sharpe discloses that polyhedral tubes shapes are well known and interchangeable in the art (see paragraph 29). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided Champain’s system with polyhedral tube shapes as taught by Sharpe in order to produce a certain flow pattern for example. Such a modification would involve the mere substitution of one well known tube shape for another to yield predictable results that do not patentably distinguish an invention over the prior art. In addition, Wondka discloses that silicone rubber tubes are well known in ventilators (column 10, line 30). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used silicone rubber for the conduits of Champain since such materials are well known and commonly used in the art for provided biocompatible flexible hoses for breathing gases. Such a modification involves the mere substitution of a well known material into a well known device to yield predictable results that do not patentably distinguish an invention over the prior art. See also *In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960), in which the selection of a known material based on its suitability for its intended use supported a prima facie case of obviousness.

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### **Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 7,527,053 is cited to show another noise reduction means in a ventilator.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KRISTEN C. MATTER whose telephone number is (571)272-5270. The examiner can normally be reached on Monday - Friday 9-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine Yu can be reached on (571) 272-4835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kristen C. Matter/  
Examiner, Art Unit 3771